## STRUCTURE NO. 00705

ROUTE 15 over RIPPOWAM RIVER STAMFORD

Routine Inspection on 5/12/2009

Inspected by Team 6 for Area 6

TEAM:	Forwarded to TE3 Jim Ma	ulis	Date 5/13/2009	
TE3:	Reviewed by TE3	~ Matilio	Date 5/19/2009	
	BMM Required	1	So	
	Town Bridge	^	Va	
	Rating <= 5 (Items 58	59,60 or 62)	les,	
F	Forwarded to Supervisor 5. Z		/ /	
F	orwarded to "To Be Copied Drav	rer" Dat		
	Date BRI-19 Ent	ered 5/19/20	-1 11 - 1	
SUPERVISO	Reviewed by Superviso	Sounces	Date 5/29/09	
SUPPORT	Date Copies Made 6/8/0	9 BMM NO TIM	DAV)	
	Scanned By:	ate Scanned	PDF Box No	

NBI: Yes

Structure No.
Inspection Date

00705 5/12/2009 Town Inspectors STAMFORD

## TABLE OF CONTENTS

Loose Forms (not bound in r	eport)	Number of Sheets Enclosed
Maintenance Memo		0
Flagging Memos		0
PONTIS Element Data Colle	ection Form	1
Plan Sheets	Already on file	0
Bound Report Pages		
Title Cover Sheet		1
<b>Table of Contents</b>		1
<b>Executive Summary</b>		0
Field Notes		0
Calculations: Lo	ad Rating Evaluation	0
Qua	ntities & Cost Estimate	0
Photo Sheets		5
Photo Images		9
Forms		
BRI-18, Bridge Inspection F	Form	5
BRI-19, Highway Bridge Inv	rentory Form	2

Comments:

107) Deck Structure Type N Not Applicable 108) Wearing Surface/Protective System: A) Type of Wearing Surface N Not Applicable B) Type of Membrane N Not Applicable C) Type of Deck Protection N Not Applicable	e No  STRUCTURE TYPE AND MATERIAL  rete  B) Design Type 11  ach:  r  B) Design Type 0  in Unit 1  Spans 0	7) Facility Carried: ROUTE 15  9) Location	Inspected By: Sonce & E. Roci No  Sufficiency Rating 64.00  Sufficiency Rating 64.00  Previous Inspection Date 4/4/2007  BS&E Received Data Entry By: Copies Made Data Entry Date: S/18/2005  Bridge Name Town Name STAMFORD IDENTIFICATION  Bridge Name Town Name STAMFORD Town Code 5) Inventory Route:  A) Record Type 1 Nainline D) Route Number 00015  B) Signing Prefix 3 State Highway C) Level of Service 1 Mainline E) Directional Suffix 0  C) Level of Service 1 Mainline E) Directional Suffix 0
	34) Skew Angle 35) Structure Flared 10 )Inv. Rte. Min. Vert Clearance 47) Log Inv. Rte. Total Horiz Clr.: 47) RLog Inv. Rte. Total Horiz Clr.: 53) Min Vert Clearance Over Bridge 54) Min Vert Under Clearance on Right 56) Min Lat Under Clearance on Left	48) Length of Max Span  48) Length of Max Span  49) Structure Length  50) Curb or Sidewalk Wid  n sec A) Left 0.9f  n sec 51) Brg Rdwy width, curb- 52) Deck Width, Out-Out  33) Bridge Median	DEPARTMENT OF TRANSPORTATION BRIDGE SAFETY & EVALUATION SHEET 1 OF 2 FORM BRI-19 REV 10/00 SHEET  OF 2 FORM BRI-19 REV 10/00 SHEET  SHE
BRIDGE COMMENTS	26deg 0 99ft 99in 1.: ft 29.0ft ft 99ft 99in Ref ft N Ref 99.9ft 0.0ft Ref	2006 3r 3r 55t 63t 65.9t 63t 2 Clos	90) Inspection Date Inspection Team 91) Frequency Class:  O S     2   0   9   4   0   6   24   01   Indepth Insp Deck Survey Access Flagman 12/9/1998 2 01 \ 1/1/1900 O O O O O O O O O O O O O O O O O O

	,				
3/200	1 Date 5/18	REVIEWED BY:	mph	50 mph	Posted Speed Limit * Utility
				‡ ∄ 5' 5'	Posted Vert Clearance On Bridge
20-		Proposed Next Indepth Insp Year 2009	tons	tons Actual P.L. All Vehicles	Rec. P.L. All Vehicles
	INSPECTION COMMENTS	INSPECTIO	tons	1	Rec. P.L. Semi-TrailerTruck
		Fence Top Type	tons	1	Actual P.L. Semi-TrailerTruck
Yes	Loose Concrete Checked?	Fence Material	tons	1	Rec. P.L. Single Unit Truck
No No	Movable Inspection System	Fence Type	tons	tons Actual P.L. 4Axle Truck	Actual P.L. Single Unit Truck
No	ft Cat Walks	Fence Height 0.0 ft	I		Other Posted Signs 2
8 8	Stand Pipes	Fence Present No		POSTED SIGNS & UTILITIES	
No	Barrel Ladder	Fence Required No	19	0135-02/0 Advertised 12/2/2009	LIST No. PR Project No. 01
	OTHER FEATURES	OTHER		115) Year Future A	ADT
		D) Approach Guardrail End 0			97) Year of Improvement Cost Est.
		C) Approach Guardrail			
	G				95) Roadway Improvement Cost \$
	\	A) Bridge Railings			
2	/	36) Traffic Safety Features:	<b>=</b>	The state of the s	76) Length of Struct. Improvement
	the Min	Items 58 Thru 72 Checked By:			75B) Work Done By
	July Occur Officer	\			75A) Type of Work Proposed
8 6/2	113) Scour Critical	oz) cdiverts		PROPOSED IMPROVEMENTS	
9 9 EK	71) Waterway Adequacy	61) Channel & Chan. Protection 5			111) Pier Abutment Protection
N N Ep.	69) Under Clear Vert & Horiz	re		TO) Navigation Fioriz Off.	116) Vert-I iff Bro Nav Min
2 2 Ep.	68) Deck Geometry	59) Superstructure 5		à	39) Navigation Control
Vi	67) Structure Evaluation	58) Deck		40	DrainageBasinCode
Rating By	APPHAISALS	, Rating By		WATERWAY	
				1 On National Register	37) Historical Significance
	+1) On acture Oratios	66) Inventory Ration 95 4		S STATE	Report Class
	A1) Structure Status	1 109.2	1	1 State Highway Agency	22) Owner
	70) Bridge Posting	150.9	3	-010	21) Maintain
				3 On Free Road	20) Toll
	Evaluation Code	_	I	0 Not on national network	110) Designated National Network
			I		103) Temporary Structure
	& E. Pirilla	Inspected By:	1	198	102) Direction of Traffic
ER	Feature Crossed RIPPOWAM RIVER	77		N No parallel structure exists	100) Deletise Highway 101) Parallel Structure
		OTER		12 Urban Principal Arterial - Other	26) Functional Class
res o3		2 05 9			104) Highway System
Voc 62	ā	SHEET 2 OF 2 FORM BRI-19 REV 10/00 T		Yes	112) NBIS Bridge Length
2000				0110011011	



BRIDGE #: 00705		INSPECTION DATE:	5/12/2009
INSPECTION TYPE: INSPECTION PERFORMED E	Routine BY: Team 6	11.211000 11.01 2011011 211121	DOPER REQUIRED: No
TOWN: STAMFORD  LOCATION: .5 MI S OF ROL  MAIN MATERIAL: Concrete	JTE 137 INT	FEATURE CARRIED: ROUTE 15  FEATURE INTERSECTED RIPPOWAM RIVER  MAIN DESIGN: Arch - Deck	YEAR BUILT: 1936 YEAR REBUILT: 0
INSPECTION VISITS:	Start 1	INSPECTORS: ime: 1:15 PM Inspector: J. Jones Task: Lead I	nenector
Inspection Date: 5/12/2009 Temperature: 63			
58. DECK			OVERALL RATING p
7	to 1"	ninous over Ballast: exhibits longitudinal, random and transverse c vide. Centerline paving seams are open with some raveling, and upto 3" deep.	racking, some open up has one adjacent spall
DECK STR. CONDITION	N Overa	Il rating is based on the condition of the wearing surface when the structure.	deck is integral with the
CURBS	5 Cond	rete curbs/safety walks: exhibit areas of severe scale, transverse	cracks and spalls.
MEDIAN	7 MBR:	exhibits minor dents leaning posts and areas of very light rust.	-
SIDEWALKS	N See o	urbs.	
PARAPET	5 Ston	e Masonry: exhibits a +/- 10' long x 2' wide section which is bowed ortheast corner, minor to moderate mortar voids and some loose a	out +/- 3" near the top at nd cracked mortar.
RAILING	N		
PAINT	N		
FENCE	N		
DRAINS	N		
LIGHTING STANDARD	N		
UTILITIES TYPE/SIZE	N		
CONSTRUCTION JOINTS	N		
EXPANSION JOINTS	N		
59. SUPERSTRUCTURE			OVERALL RATING 5
BEARING DEVICES	TING 1		
STRINGERS [	Intrade Heav	s : exhibits efflorescence and active leakage at the interface of the intrados a	and the arch ring.
	A +/-	5' long diagonal crack with efflorescence and active leakage at th	e northwest corner.
	Hairli	e map cracking at random locations.	
	Pop-o	uts with exposed rebars (rusted) at random locations.	
	A spa	Il with exposed rusted rebar with a small adjacent hollow area on the	he lower northwest
		ed rusted shallow rebar along the construction joint on the east sid djacent to construction joint.	de. D shape potential





BRIDGE #:	0070	5	INSPECTION DATE:	5/12/2009
59. SUPERSTR	UCTURE			OVERALL RATING 5
			An area of moderate scale with adjacent spall with rusted rebar on the	southwest corner.
			Rust stains and efflorescence leakage at random locations.	
			Spandrel walls : exhibit Random mortared joints exhibit heavy efflorescence seepage.	
			Areas of random cracking with and without efflorescence.	
(	GIRDERS	N		
FLOOR	BEAMS	N		
TRUSSES-G	ENERAL	N		
TRUSSES-F	PORTALS	N		
TRUSSES-	BRACING	N		
	PAINT	N		
	RUST	6	Moderate rust on exposed rebars.	
MACHINERY M	OV SPAN	N		
RIVETS	& BOLTS	N		
WELDS &	CRACKS	N		
TIMBE	R DECAY	N		
CONCRETE C	RACKING	5	See above.	
COLLISION	DAMAGE	8		
MEMBER ALI	GNMENT	N		
DEFLECT. UND	ER LOAD	N		
VIBR. UND	ER LOAD	N		
STAN	ND PIPES	N		
BARREL L	ADDERS	N		
			ARE BARREL LADDERS OSHA COMPLIANT?	
60. SUBSTRUC	TURE			OVERALL RATING 6
		RATING		5
ABUTMEN	ITS-STEM	N		
ABUTMENTS-B	ACKWALL	N		
ABUTMENTS-F	OOTINGS	7	Northeast retaining wall footing exposed 30" high x full length (possibly found no undermining.	as built). Probed and
			Previous reports noted footing #1 exposed. Used boat this inspection rappears that rip rap has been placed along this area. Probed both stem	no footing was found, it ms and no undermining
ADUT OFT	TI EMENT	N.	found.	
ABUTSET		=	Heavy officeresponds and missing and or greated marter as residence	age Streem gauge
ABUTMENTS-WII	NGWALLS	6	Heavy efflorescence and missing and or cracked mortar on random are mounted on northwest wing.	sas. Stream gauge



BRIDGE #:	00705	INSPECTION DATE:	5/12/2009
60. SUBSTRUCTU	URE		OVERALL RATING 6
PIERS/BENT	S-CAPS N		
PIERS/BENTS-PIL	E BENT N		
PIERS/BENTS-C	COLUMN N		
PIERS/BENTS-FO	OTINGS N		
PIERS/BENTS-SET	TLEMent N		
EROSION	-SCOUR 6	Minor scour along the west side and silt accumulation along the east u	p to 2'.
		Footing on the northeast retaining wall exposed up to 30" high with no	undermining.
CONCRETE CRACK		See comment under wing walls.	
STEEL COR	ROSION N		
	PAINT N		
TIMBER	R DECAY N		
COLLISION	DAMAGE 8		
	DEBRIS 8		
61. CHANNEL PR	ROTECTION		OVERALL RATING 6
	RATIN	Scour along the west stem and the northeast retaining wall.	
	SCOUR 6	Minor erosion along the northwest embankment.	
EMBANKMENT E			
	DEBRIS 5	Piles of muck and leaves in channel and some large rocks.	
	ETATION 8	Embankments are well vegetated.	-tt-ining well and days
CHANNEL	CHANGE 7	The channel has silted in along stem # 2. Channel favors the northeasthe east stem.	st retaining wall and down
FENDER	SYSTEM N		
SPUR DIKES &			
	RIP RAP N		
62. CULVERTS &	RETAINING	S WALL	OVERALL RATING N
APPROACH CON	NDITION		OVERALL RATING 6
	RATII		
	CH SLAB N	Paved over.	
RELIEF	JOINTS N		
APPROACH GUI	IDE RAIL 6	MBR at the northeast is scraped, flattened out, leaning toward traffic a of the anchoring bolts for +/- 30' long. No traffic safety at northwest.	nd has partial detachment
		Broken wire rope rail at the southeast.	no anon un to dii Adinar
APPROACH PAY	VEMENT 6	Bituminous pavement exhibits transverse and longitudinal cracking so spalling along the paving seams.	me open up to 1°. Minor
APPROACH EMBA	NKMENT 7	Minor erosion.	



BRIDGE #:

00705

INSPECTION DATE:

5/12/2009

BRIDGE #: 00705	INSPE	CTION DATE:	5/12/2009
APPROACH CONDITION			OVERALL RATING 6
TRAFFIC SAFETY FEATURES:			
BRIDGE RAILINGS 0			
TRANSITIONS 0			
APPROACH GUARDRAILS 0			
APPR. GUARDRAIL ENDS 0			
LOAD POSTING			
SINGLE UNIT (TONS)			
HS (TONS)			
4 AXLE (TONS)			
3S2 (TONS)			
ADVANCE WARNING Y/N			
LEGIBILITY			
VISIBILITY/LOCATION			
MISC.			
MIN VERT. UNDERCLR.	0, 0,		
POSTED CLR. UNDER BRIDGE			
POSTED CLR. ON BRIDGE	"		
ADVANCE WARNING (Y/N)	No		
SPEED LIMIT (IF ANY)	50 <sub>MPH</sub>		
CHARACTER OF TRAFFIC			
ADDITIONAL NOTES			
Boat was used for inspection	. No channel elevation done		
ADDITIONAL COMMENTS:			
Bridge ID painted on parape	s. High water monitoring gauge mounted to the northwest wi	ing at the inter	face of the arch ring.
Inspectors' Signatures:	1) James Fefore	Date: 05/1	18101
	2) El Twee	Date: 05_/2	8 109
	3)	Date:/_	'
	4)	Date:/_	'
P.E. Signature:		Date:/_	
P.E.#:			
Reviewed by:	Jeanes Jahr CDOT	Date: 5_/	19,2009

#### Structure Inventory and Appraisal Sheet (English Units)

FC Frequency 92A: NA

Element Frequency: 24 months

Sufficiency Rating: 64.0 Bridge Key: 00705 Agency ID: 00705

**IDENTIFICATION** 

Facility Carried 7:

09 Connecticut

Struc Num 8: 00705

Location 9:

.5 MI S OF ROUTE 137

Rte.(On/Under)5A: Level of Service 5C: Route On Structure

Rte. Signing Prefix 5B: 3 State Hwy Rte. Number 5D: 00015

Directional Suffix 5E: 0 N/A (NBI)

% Responsibility: County Code 3:

0 Fairfield

SHD District 2 Place Code 4:

STAMFORD

Mile Post 11:

10.118 mi

Feature Intersected 6: RIPPOWAM RIVER

Latitude 16:

41d 06' 54"

Longitude 17:

073d 33' 18"

Border Bridge Number 99: NA

STRUCTURE TYPE AND MATERIALS

Number of Spans Main Unit 45: 1

Main Span Material/Design 43A/B:

1 Concrete

11 Arch-Deck

Deck Type 107:

N N/A (NBI)

Wearing Surface 108A:

N N/A (no deck (NBI)) N N/A (no deck (NBI))

Deck Protection 108C:

N N/A (no deck (NBI))

AGE AND SERVICE

Year Reconstructed 106: Unknown

Type of Service on 42A: Type of Service under 42B: 5 Waterway

Lanes on 28A: 4

Lanes Under 28B: 0

Truck ADT 109: 3 % ADT 29: 64,100

Detour Length 19: 3.1 mi Year of ADT 30: 2003

GEOMETRIC DATA

Length Max Span 48: 55.1 ft

Structure Length 49: Curb/Sidewalk Width R 50B: 1.0 ft

Curb/Sdwlk Wdth L 50A: 1.0 ft Width Curb to Curb 51: 56.1 ft

Width Out to Out 52:

65.9 ft

Approach Roadway Width 32: 63.0 ft

Median 33: 2 Closed Med w/o Barrie

Deck Area: 3,530.6 sq. ft

Skew 34: 26.00 ° Structure Flared 35: Minimum Vertical Clearance Over Bridge 53:

328.1 ft

Minimum Vertical Underclearance Reference 54A:

N Feature not hwy or RR

Minimum Vertical Underclearance 54B:

0.0 ft

Minimum Lateral Underclearance Reference R 55A:

N Feature not hwy or RR

Minimum Lateral Undrolearance R 55:

Minimum Lateral Undrclearance L 56:

327.8 ft

INSPECTION

Frequency 91: Inspection Date 90:

5/12/2009

FC Inspection Date 93A: NA Next FC Inspection: NA

Next UW Inspection: NA

Next Inspection:

UW Frequency 92B: NA SI Date 93C: SI Frequency 92C: NA

UW Inspection Date 93B:

05/12/2011

Next SI: Element Inspection Date: 05/12/2009 Next Elem. Insp. Due: 05/12/2011

CLASSIFICATION

Defense Highway 100: 1 STRAHNET hwy

Parallel Structure 101: Temporary Structure 103:

No || bridge exists

Direction of Traffic 102: 2 2-way traffic 1 On the NHS

NBIS Length 112:

Long Enough 12 Urban Fwy/Expwy

Toll Facility 20: 3 On free road

Historical Significance 37: 1 Br on Natl Reg Hist PI

Custodian 21:

01 State Highway Agency 01 State Highway Agency

CONDITION

Sub 60: 6 Satisfactory

Deck 58: N N/A (NBI) Culvert 62: N N/A (NBI)

Inventory Rating 66:

Design Load 31:

Channel/Channel Protection 61:

5 Bank Prot Eroded

LOAD RATING AND POSTING

Inventory Rating Method 65: 1 LF Load Factor Operating Rating Method 63: 1 LF Load Factor

> HS61.2 Operating Rating 64:

4 M 18 (H 20)

Posting 70:

5 At/Above Legal Loads

A Open, no restriction Posting status 41:

**APPRAISAL** 

Bridge Rail 36A: Transition 36B:

Bridge Cost 94:

Roadway Cost 95:

Pier Protection 111:

1 Meets Standards 0 Substandard

Approach Rail 36C: Approach Rail Ends 36D: 1 Meets Standards 0 Substandard 3 Intolerable - Correct

Deck Geometry 68: Str. Evaluation 67: N Not applicable (NBI) Underclearance, Vertical and Horizontal 69:

Waterway Adequacy 71: 9 Above Desirable

3 SC - Unstable

Approach Alignment 72:

8 Equal Desirable Crit

Scour Critical 113:

PROPOSED IMPROVEMENTS Type of Work 75:

38 Other Structural Length of Improvment 76: 0.3 ft

Total Cost 96: Year of Cost Estimate 97: 2000 \$ 1,000 \$ 2,000

Future ADT 114: Year of Future ADT 115:

32,050 2024

**NAVIGATION DATA** 

Navigation Control 38: Vertical Clearance 39: 0.0 ft

Unknown (NBI)

Horizontal Clearance 40:

0.0 ft

Lift Bridge Vertical Clearance 116:

ELEMENT CONDITION STATE DATA

		DINDITION STATE DA		T-4-1 O4-1	0/ 1- 4	Qty. St. 1	0/:-0	04. 04.0	0/ in 2	Ot. 01 2	9/ in /	Ohi St A	04 in 5	Oty St 5
Str Unit	Elm/Env	Description	Units	Total Qty	% ID 1	Qty. St. 1	% IT Z	Qty. St. 2	70 111 3	Qty. St. 3	70 111 4	Qty. St. 4	70 111 3	Qty. St. 5
UNITO	40/3	P Conc Slab/AC Ovly	(SF)	4,155	100 %	4,155	0 %	0	0 %	0	0 %	. 0	0 %	C
UNITO	144/3	R/Conc Arch	(LF)	52	85 %	45	8 %	4	8 %	3	0 %	. 0	0 %	C
UNIT0	333/3	Other Bridge Railing	(LF)	126	100 %	126	0 %	0	0 %	0	0 %	0	0 %	C
LINITO	334/3	Metal Rail Coated	(LF)	63	52 %	33	48 %	30	0 %	0	0 %	. 0	0 %	C

Feature Crossed:	Feature Carried:	Town:	Bridge No.
Rippowam River	Route 15	Stamford	00705
Project No.:	Date Inspected:	Inspected by:	Inspected by:
	05/12/2009	ED PUCILLO	JAMES JONES



Photo #1: View looking East

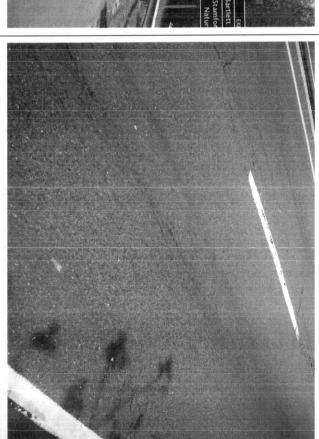


Photo #2: General view of wearing surface N/B

Feature Crossed:	Feature Carried:	Town:	Bridge No.
Rippowam River	Route 15	Stamford	00705
Project No.:	Date Inspected:	Inspected by:	Inspected by:
	05/12/2009	ED PUCILLO	JAMES JONES



Photo #3:
North elevation



Photo #4: View looking upstream

Feature Crossed:	Feature Carried:	Town:	Bridge No.
Rippowam River	Route 15	Stamford	00705
Project No.:	Date Inspected:	Inspected by:	Inspected by:
	05/12/2009	ED PUCILLO	JAMES JONES

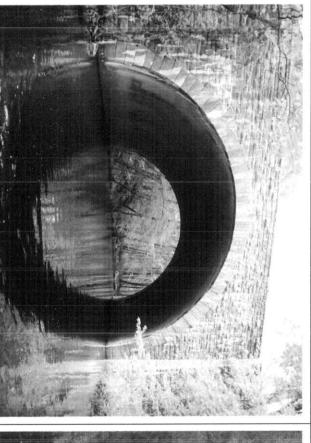


Photo #5:

South elevation



Photo #6:

Construction joint in structure

Feature Crossed:	Feature Carried:	Town:	Bridge No.
Rippowam River	Route 15	Stamford	00705
Project No.:	Date Inspected:	Inspected by:	Inspected by:
	05/12/2009	ED PUCILLO	JAMES JONES



Photo #7: Stream gauge at inlet



Photo #8: Spall with active leakage stem 1

CONTRACTOR OF THE PROPERTY OF
Do

Double-click here to insert picture

Photo # 9:

Cracks with efflo. on inter face north side